INTEREST RATES AND INFLATION

A statement before the House of Commons Standing Committee on Finance, Trade and Economic Affairs by Louis Rasminsky, Governor of the Bank of Canada, Thursday, July 3rd, 1969

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Mr. Chairman, I would like to begin by saying that I am pleased to be here to try to help your Committee in its consideration of present interest rate levels in Canada. By historical standards these are certainly very high. I welcome the enquiry on which you have embarked. In my opinion it will bring you right to the heart of the problem of inflation which confronts us in Canada, and I think that the deliberations of your Committee can contribute to a better understanding of the relationship of interest rate levels to the general problem of inflation.

We are confronted in this country, and in fact in most countries of the western world, with serious problems of high interest rates, inflation, and a strong inflationary psychology. These problems are very much inter-related. The problem of inflationary psychology, by which I mean the widespread belief that inflation is here to stay, is particularly difficult to deal with. It has arisen from the failure for one reason or another, both here and abroad, to bring inflation under control at an earlier stage and from the persistent rise in costs and prices over a number of years. I propose therefore as a prelude to my remarks on the present interest rate situation to review briefly some of the highlights of the economic developments in recent years which have brought us to the position in which we now find ourselves.

In some ways, the most outstanding and important fact in our present economic situation is that the economy has been moving forward rapidly and virtually without interruption for more than eight years. It is the longest period without a recession that we have ever experienced in peacetime in this country. There is no doubt that Canadians have benefitted greatly from this extraordinary run of prosperity. Between the first quarter of 1961 and the first quarter of 1969 real output in Canada increased by about 60 per cent. The increase per person employed was 22 per cent. Personal consumption in real terms, that is, after allowing for price increases, rose by 51 per cent in aggregate and by 31 per cent on a per capita basis. This last figure can be regarded as a very rough measure of the improvement in the standard of living in Canada over the eight-year period, though it does not take into account the sharp increase in the volume of services provided by governments, for example, in the form of education, health services, roads, etc. Unemployment, which averaged 7.6 per cent of the labour force on a seasonally adjusted basis in the first quarter of 1961, was 4.2 per cent in the first quarter of this year and over the past four years has averaged 4.1 per cent. The number of jobs rose by $1\frac{3}{4}$ million, or 31 per cent, over the eight-year period. In addition we have greatly added to our facilities for production of goods and services including government services. For example, in real terms, expenditures on business fixed investment rose by 64 per cent and on housing by 62 per cent.

It would have been astonishing if the degree of pressure of demand which we have been experiencing during the past eight years or more did not result in some distortions and excesses. These constitute the other side of the ledger and they have taken the form of a progressive worsening of price and cost inflation during the past few years which has yet to be brought under control. Consumer prices, which rose at an average annual rate of 1.5 per cent in the first four years of the expansion, increased at an average annual rate of 3.7 per cent in the second four-year period. The increase over the past twelve months was 4.7 per cent and over the first five months of this year the consumer price index has been rising at a seasonally-adjusted annual rate of more than 5 per cent. By far the largest component in industrial costs, wage and salary rates, has not been rising as rapidly as a few years ago. However, it is still increasing at a rate far in excess of the growth in output and an important leading indicator of costs, i.e., the average increase provided in new settlements, has in recent months turned up again.

The long period of continuous economic expansion we have enjoyed - over 100 months since the spring of 1961 - and the price increases of recent years have had a powerful impact on attitudes in our society. In the same way that the long years of serious underemployment and deflation in the 'thirties produced a depression psychology that lingered well into the post-war period, so the recent long period of continuous prosperity, plus perhaps the fact that those few recessions which we have experienced in the past quarter-century have all been relatively short-lived, appears to have had a profound effect on attitudes. Many people holding key positions in different sectors of our economic life have had no personal experience of an economic set-back, and one has the impression that there is now unusual confidence that good times can be counted on to last indefinitely. There is a disconcertingly widely-held view that inflation is a normal or even necessary concomitant of economic expansion and that public policies of restraint will not be carried to the point of dealing effectively with inflation, that almost any price or cost increase will soon be brought onside by the general rise in the price level. This attitude encourages various economic groups to try to improve their relative positions substantially without worrying unduly about the possibility that as a result they might be priced out of the market for their services or products. It is the same psychology which makes borrowers willing to tie themselves into contracts involving the payment of high interest rates over long periods ahead, and which leads investors to insist on a relatively high interest return in order to allow for a prospective erosion in the value of money.

I shall return to this central problem of inflationary psychology later. I would like now to talk about monetary policy. I intend to review briefly the monetary policy followed in recent years but before doing so I should like to take the liberty of reminding members of the Committee of the basic manner in which monetary policy works. Perhaps I should start by saying a word or two about how it does <u>not</u> operate. In our system, the central bank does not set any of the interest rates paid by or received by the general public. Nor does it make any qualitative decisions in regard to the allocation of credit to particular borrowers or groups of borrowers in the economy. Although there are some important federal and provincial government lending agencies, and also the Industrial Development Bank which is a wholly-owned subsidiary of the Bank of Canada, the allocation of credit and the determination of institutional and individual market rates of interest are basically settled in the private sector of the economy within the context of the general credit conditions that prevail. The central bank exerts an important influence to be sure, but it does so indirectly, by the effect that its policies have on general credit conditions, that is to say the over-all availability and cost of money. Changes in credit conditions in turn have an effect on the willingness and the ability of the public generally to raise the funds required to fulfil their spending plans, and hence on the total level of spending in the economy. Changes in credit conditions in Canada relative to those outside the country also have an important influence on flows of capital into and out of Canada and on the level of our exchange reserves.

As a technical matter, the Bank of Canada exerts its influence on credit conditions by using the powers which Parliament has given it in the Bank of Canada Act, mainly those powers which allow it to control the cash reserve base of the chartered banks as a group, and in this way to control the rate of expansion of the banking system. Competition between banks and other financial institutions and in financial markets generally for the available funds causes this influence to spread through the whole economy.

Subject to certain practical limitations, in particular the influence of changes in external interest rates, the central bank can use its powers to bring about an easing in credit conditions in periods when economic expansion is unduly slow and there is no problem of inflation. In other periods, when inflation is the main threat, the central bank can cause credit conditions to tighten, i.e., it can slow down the rate of expansion of the banking system and cause credit to become less readily available and more expensive. Interest rates play an important role in allocating the available supply of credit in a free market economy and credit cannot become scarce relative to the demand for it without interest rates rising. There is no use in trying to fool ourselves - an anti-inflationary monetary policy cannot fail to involve tighter credit conditions, including relatively high interest rates, and conversely, under conditions like the present, a policy of making credit relatively cheap and easy to obtain can do nothing but exacerbate the problem of inflation.

I know that the view is sometimes expressed that high interest rates are themselves inflationary because they increase the costs of those who do succeed in borrowing money. While it is true that there is some effect in this direction, the much more important role of high interest rates is to provide an incentive for people not to spend and not to borrow. In its simplest terms, an anti-inflationary monetary policy operates by encouraging people to add to their holdings of financial assets and to avoid incurring financial obligations, that is, to increase their saving, in preference to increasing their spending which exerts upward pressure on the prices of goods and services.

There are of course many factors other than monetary policy which influence credit conditions in Canada. These include changes in external credit conditions and expectations about future price and interest rate trends, as well as all the influences affecting the supply and demand for funds. Fiscal and debt management policies of governments are most important in this context. In an inflationary period, for example, if fiscal policies are not actively used to combat inflation, the demands of governments on the capital market will be correspondingly higher, and in order for an anti-inflationary monetary policy to be successful, still tighter credit conditions will be required. The task of the central bank is to assess all of the factors affecting credit conditions and to decide whether in all the circumstances it should attempt to reinforce or mitigate their effect and in what degree. It follows therefore that while monetary policy cannot be expected to take responsibility for the whole mix of economic policies and for all the economic developments and attitudes that lead to a certain set of credit conditions, the central bank cannot avoid responsibility for attempting to use its powers to influence credit conditions, including the general level of interest rates, in the way it thinks appropriate from time to time - by seeking to maintain them if it regards them as about right in all the circumstances or attempting to bring about a change if it regards them as inappropriate to the economic situation and outlook.

I am aware that in this attempt to provide a short explanation of the way in which monetary policy works I have been guilty of considerable over-simplification. However, I would like now to proceed to a brief review of monetary policy in recent years. I believe that it can be brief because I have already covered most of the ground in my Annual Reports as well as in speeches.

After the economic expansion got under way in the spring of 1961 and was moving ahead satisfactorily, the main task of monetary policy was to ensure that the growing demand for credit did not result in an undue tightening of credit conditions so long as the economy was operating in a non-inflationary way well below its potential. There was a deviation from this policy at the time of the exchange crisis of 1962 but it was quite temporary. Aside from this, over the whole period from the spring of 1961 to the spring of 1965 credit conditions remained relatively stable with interest rates fluctuating within a narrow range. By early 1965, however, most of the slack in the economy had been taken up and monetary policy began to allow the rising demand for credit to have an impact on credit conditions. Interest rates rose substantially through the remainder of 1965 and well into 1966. The rate of increase in bank assets slowed markedly. In general, credit conditions became very tight.

The economic expansion moderated during 1966 and there followed a period of relatively slow growth that lasted for about eighteen months.

Toward the end of 1966 the lessening of demand pressures on the economy made it seem appropriate to permit some easing in credit conditions. Much the same pattern of events occurred in the United States. In both countries, however, the decline in interest rates was short-lived mainly because of expectations that the slowing of economic expansion was only temporary and because of large demands for credit by governments. Interest rates began to rise again in the spring of 1967. Beginning in November 1967, when sterling was devalued, it became necessary for monetary policy to give priority to the defence of the exchange value of the Canadian dollar and, as members of the Committee are aware, there was a very sharp exchange crisis in Canada in the first quarter of 1968. This required interest rates which rose to the highest levels in our history up to that time.

Thanks to other measures as well as monetary policy, the defence of the Canadian dollar was entirely successful and by June of 1968 it was possible to begin to dismantle the defences which had been erected. As part of this programme it seemed reasonable to allow some relaxation of the very tight credit conditions which had been enforced during the exchange crisis. This view was supported by some evidence that the pressure on prices and costs was easing, and with the enactment of an income tax surcharge in the United States the outlook for the economies of Canada and the United States did not appear to be unduly strong. Accordingly, some relaxation of monetary policy was undertaken in Canada, as it was in the United States. Interest rates were allowed to decline during the summer months although they did not return to the levels that prevailed before the devaluation of sterling. This easing of credit conditions was accompanied by a substantial rate of increase in chartered bank assets and chartered bank liquidity. Large cash requirements of the Government were also an important factor in this situation.

As matters turned out, the strength of the North American economy was generally underestimated and early in the autumn the Bank took the view that monetary policy should again be directed toward restraint and credit conditions have become progressively tighter since that time. Excess bank liquidity has been sharply reduced. The cash reserve management of the Bank has put the chartered banks in a position where they have had to dispose of liquid assets on a large scale - something over $750 million - in order to finance loan expansion. In addition a further $250 million of liquid assets held by banks was in effect immobilized by an increase in the minimum secondary reserve requirements announced in April. Over this period the Bank Rate was raised on three separate occasions. The rate of expansion of chartered bank assets has slowed markedly and the banks have been tightening their lending policies. The process of controlling chartered bank liquidity was facilitated by the considerable reduction which was concurrently taking place in the Government of Canada's borrowing requirements due to the improvement in its fiscal position. Monetary policy has also been tightened sharply in the United States. Under the influence of both external and internal developments, interest rates in Canada have recently risen well above the record levels reached during the exchange crisis of early 1968.

At the present time the average yield on long-term Government of Canada bonds is $7\frac{1}{2}$ per cent compared with a peak of 7 per cent during the exchange crisis of last year, about $6\frac{1}{2}$ per cent last September, just over $6\frac{1}{4}$ per cent in November 1967 before the devaluation of sterling and less than $5\frac{1}{4}$ per cent in the spring of 1961. The most recent cash offering of Government of Canada bonds dated July 1st included a nine-year issue yielding 8 per cent and a one year issue yielding $7\frac{3}{4}$ per cent. Average yields on outstanding long-term provincial government bonds have recently been $8\frac{1}{4}$ per cent or more and those on municipal bonds and industrial bonds about $8\frac{3}{4}$ per cent; yields on conventional mortgages have been running at $9\frac{1}{2}$-$9\frac{3}{4}$ per cent and on NHA mortgages $9\frac{1}{4}$-$9\frac{3}{8}$ per cent. Bank Rate is $7\frac{1}{2}$ per cent, equal to the previous peak reached during the exchange crisis in the spring of last year and the yield on 3-month Treasury Bills at the tender last week was 7.13 per cent. Interest rates paid and charged by financial institutions have also reached high levels. Last week the chartered banks raised their prime commercial lending rates to $8\frac{1}{2}$ per cent. On the other side of the ledger, the interest rate paid by banks on non-chequable savings deposits was raised to $6\frac{1}{2}$ per cent. All of these rates reflect among other things the strong demand for credit relative to the supply (under the monetary policy being followed) and the pull of external rates. If one uses as a measure the proportion of the chartered banks' total assets in relatively liquid form, the banks as a group are in a tighter over-all liquid position than at any time during the post-war period. This has made it necessary for banks to ration their available funds, a process which would be much more difficult and arbitrary if lending rates were completely out of line with market rates.

Perhaps I might pause for a moment here to assure members of the Committee that the Bank of Canada is well aware that tight credit conditions can have quite uneven impacts in an economy such as ours. For this reason, at recent meetings with executives of the chartered banks the Bank of Canada has expressed the view, as it has in earlier periods of tight credit conditions, that these institutions should have special regard for borrowers in less prosperous areas of the country and for small businesses that do not have alternative sources of credit. In addition, very recently when it became apparent that in view of the higher bank loan rates in the United States U. S. corporations would have an incentive to borrow here directly or through Canadian subsidiaries, I suggested to the banks that they should give priority in the use of their total loan resources to the credit-worthy demands of their Canadian customers.

I have to make it clear to the Committee, however, that the Bank of Canada has not resisted the sharp upward trend in the general level of interest rates that has occurred since last autumn. It has been our view that taking all the circumstances into consideration an attempt by the Bank to encourage a large enough expansion of credit to resist such a trend would have been contrary to the requirements of an anti-inflationary monetary policy and, in view of the sharp rise in external interest rates, it would also have weakened our balance-of-payments position unduly. We are prepared to take our full share of responsibility for the present general level of interest rates in Canada.

In any case, it would be a mistake to over-estimate the capacity of a central bank, by following an easy monetary policy in inflationary conditions, to bring about lower levels of interest rates that would last for any significant period of time. No doubt the central bank could, by undertaking a rapid monetary expansion, cause some temporary reduction in short-term interest rates but this would increase inflationary expectations and indeed bring about a situation which was in fact more inflationary, so that the longer-term result would almost certainly be a higher rather than a lower level of interest rates.

There are a number of other observations that I would like to make about the present situation. The first is that the unhappy combination of high interest rates, inflation and a strong inflationary psychology I have referred to is by no means a phenomenon peculiar to Canada. With few exceptions it is a general problem in western countries. Indeed, the problem of how to combine reasonable price stability with a minimum of unused productive capacity has for some time been a major unsolved problem of all advanced economies. Recent developments in the United States have been particularly important in our situation here. The fact that prices have risen there at an even greater rate than in Canada in the past year has added to the pressures on our price levels. The effects of U. S. monetary policy and the strong demand for bank credit have combined to make large U. S. banks willing to pay extraordinarily high interest rates on short-term funds from abroad - recently as high as $12\frac{1}{2}$-13 per cent in the Euro-dollar market - and this has put strong upward pressure on the interest rate levels of many countries including Canada. The tight position in which New York banks find themselves has also led them to raise the rates which they charge on prime commercial loans to $8\frac{1}{2}$ per cent, a rate which in fact works out to more than 10 per cent when allowance is made for the widespread practice of requiring non-interest bearing compensating balances from borrowers. This produces an incentive for American companies to encourage their subsidiaries to borrow elsewhere, including in Canada, which adds to the upward pressure on rates here.

I do not believe that the rise in the general level of interest rates in this country is to any significant extent the product of our institutional arrangements. Let me make it clear that I say this without in any way wishing to influence the Committee in regard to any particular line of enquiry it may follow. Nor do I wish to appear to be defending or criticizing the level of profits of any group of financial institutions. That is not my business. While any particular rate paid or charged by financial institutions may not fit into the whole structure of interest rates in exactly the right place, it is my opinion that private financial institutions have not had an improper influence on the determination of the general level of interest rates in this country. They tend to follow rather than lead changes in credit conditions, which are primarily the responsibility of the central bank.

I would like now to raise the question: why haven't the high interest rate levels that we have seen been more effective in restraining the use of credit and the volume of spending? I believe that the willingness of many borrowers to incur obligations to pay high interest rates, often for long periods, is in large part due to the strong inflationary psychology that has developed. For those borrowers who firmly expect prices to go on rising at 4 to 5 per cent per annum, or perhaps even more, interest rates of 8 to 10 per cent before tax do not appear particularly high. And for investors who have the same price expectations, the relatively high yields available do not seem particularly attractive when they allow for taxes and the expected erosion of the value of their capital. Moreover, the over-all trend of interest rates in recent years, or indeed in most of the post-war period, has not been such as to encourage the desired response to high interest rates, namely a reduction in spending. With the secular rise in interest rates which has occurred, those who have postponed spending plans because of the cost and difficulty of borrowing have not usually found that they have been able to obtain funds at lower rates later on. Nor have they often obtained a price advantage by postponing spending. This is part of the reason for the development of an inflationary psychology. If we want to move toward significantly lower interest rates we shall have to break these inflationary expectations.

I should like to raise a question now which may surprise and shock you. The question is -- What is really wrong with inflation? Why does the Bank of Canada feel that it must be so concerned with it? The reason I feel it necessary to raise this question is that there is a respectable body of opinion, and not entirely confined to academic circles, which feels that concern about inflation is greatly overdone.

If this matter can be looked at for a moment in a rather legalistic way, I suppose that one reason why the Bank feels that it has the duty to resist inflation is that it understands that reasonable price stability, along with reasonably full employment and sustained economic growth, is one of the economic goals of our society. These goals are not set by the central bank itself and so long as Parliament does not indicate that reasonable price stability has ceased to be an objective of economic policy, the central bank must feel bound to do what it can to contribute to its achievement. I am bound to add that I am personally convinced that reasonable price stability is in fact an essential goal, that the attainment of our other economic goals depends in important degree on it, and that the failure to control inflation can do great harm.

In the first place, the inflationary process produces widespread and serious inequities. The question is sometimes asked: cannot everyone adjust to inflation? The answer is an emphatic no; they cannot, or at least not quickly enough to avoid serious inequities. It is certainly true that the longer inflation continues the more people will try to adjust to it through income demands and, in the case of certain types of income such as pensions and other allowances, through political action. But the more successful they appear to be in adjusting to it the steeper will be the upward spiral of inflation, with the least powerful groups always lagging painfully behind.

Apart from the problem of equity, there is also the serious risk that inflation will proceed more rapidly here than in other countries so that the competitive position of our economy will be undermined with consequent exchange and other dislocations and an impairment of our chances of sustained economic growth.

Indeed, one of the most powerful arguments against inflation is that although it does not result in any increase in real output, except perhaps in the very short run, it places economic expansion in great jeopardy. It is not possible to fool all of the people all of the time, and as more and more of them succeed in taking steps to protect themselves against inflation by demanding greater increases in money incomes and by hedging against inflation through the purchase of equities and real assets, more and more pressure is put on prices and costs. As this happens and the inflation becomes cumulative, the kind of monetary and fiscal policies that become necessary to keep inflation from accelerating are at least as restrictive in terms of their effects on output and unemployment as the policies that would earlier have been necessary to maintain reasonable price stability. Nothing is gained by the toleration of inflation but in the process, the population is put to an absurd degree of inconvenience in the effort to try to keep up with inflation. Great inequities are suffered and, perhaps most important of all, a great risk is run of allowing inflation to get out of hand completely and seriously damaging our capacity for durable economic growth.

During a period of inflation more and more people have to spend more and more time and talent not producing anything of value to themselves or anyone else but just trying to protect themselves from being injured by inflation. Such an environment also creates, or at any rate appears to create, growing opportunities for a minority of astute traders or manipulators to make windfall profits. It is conducive to the development of a speculative atmosphere in which questionable or marginal business and financial propositions get by with less than adequate scrutiny.

One of the casualties of a prolonged period of inflation is the market for long-term debt obligations. This is because investors become increasingly reluctant to commit their funds in such a form even at progressively higher interest rate levels. Private corporations who wish to raise long-term funds can try to combat this trend by offering equity participation, often in the form of convertible debentures. This option is not open to governments - federal, provincial or municipal - or to home buyers or to publicly-owned utilities who must rely on debt financing to cover their borrowing requirements. It is social capital formation rather than private capital formation which must bear the brunt of the harm done to the long-term capital market by inflation.

If inflation is responsible for so many difficulties, including the high level of interest rates, the question might well be asked, why has it not been brought under control at a much earlier stage? This is not an easy question to answer and I shall limit myself to making only a few observations about it. It seems to me that there have been three crucial periods in the fight against inflation over the past eight years. The first was in 1965-1966 when the inflationary pressures first became strong. A major factor that added to the difficulty of keeping them under control in the United States and Canada was a sharp rise in government expenditures not accompanied by adequate increases in tax revenue. In Canada the total of expenditures of all levels of government increased by 27 per cent between 1964 and 1966. The Vietnam war was an important cause of the burst of government spending in the United States.

Economic policy was successful in slowing the rate of spending in 1966 and as I have already mentioned there was a period of slower growth which lasted for about eighteen months. Partly as a result of the continued acceleration of the Vietnam war, an upsurge in the U. S. economy occurred in late 1967 and early 1968 and its effects were transmitted to Canada despite the tight credit conditions associated with the exchange crisis. But as I have said, the outlook in mid-1968 following the increase in income taxes in the United States did not appear unduly strong in that country or in Canada. Looking back this appears to have been another crucial point. What went wrong? In particular, why didn't the U. S. economy respond to the tightening of fiscal policy in the way that might have been expected?

One reason, I think, is that the inflationary psychology had already become too strong. The expectation of continued inflation along with rising incomes led people to continue to spend and reduce their rate of saving despite tax increases and despite relatively high interest rates. Incidentally, the same phenomenon has been evident in Britain in recent years where they have experienced considerable inflation and where consumer spending has continued at a high rate despite fiscal and monetary restraints. This is one of the most worrying aspects of the inflationary psychology. Normal reactions to policy measures cannot be counted upon - at least not unless the policy measures are unusually strong.

The third crucial period in the fight against inflation is, I believe, the present one. In both the United States and Canada fiscal and monetary policies are now set on an anti-inflationary course and the important thing is to have the determination to persist with them as long as necessary.

Another reason why fiscal and monetary policies have not brought inflation under control by now is that here and in other countries they have been used somewhat cautiously because of the very natural fear of producing a higher level of unused resources than the minimum required to do the job of combatting inflation. If there had not been this concern, there would be no compelling reason why fiscal and monetary policies should not have been pressed hard enough to ensure beyond any doubt that inflation would be brought to an end. But this concern does exist, and that is why the choice of methods of dealing with inflation presents such a major problem in our economic system. It is not enough to say that inflation "ought" to be stopped without involving a temporary increase in the level of unused resources;

the whole problem is to find a way of achieving this result.

While there may be general agreement that it would be nice if inflation were halted in a relatively painless way, there are in fact only a limited number of ways of dealing with inflation in a market economy. Monetary and fiscal policies are directed toward the management of aggregate demand, or total spending if you like. Monetary policy influences the level of spending through its effect on the availability and cost of money. Fiscal policy exerts an influence through changes in the level of disposable income resulting from changes in tax rates and directly through changes in the level of government expenditure. Government lending programmes also affect the level of total spending in the economy. The management of demand is of central importance and, as I have already indicated, if the halting of inflation were the sole concern of public policy this could be achieved by fiscal and monetary policies alone. What other kinds of policies can be followed to supplement demand management and to minimize the impact on unemployment and unused capacity? The list is very short if we are to maintain the market character of our economy. They are mainly measures to improve the supply side of the picture. They include steps to improve the mobility of manpower, the training of the labour force including the provision of greater educational opportunities and also certain other measures such as reductions in tariffs. In recent years governments have placed much more emphasis on supply policies of this kind and this is greatly to be welcomed. However, it has to be remembered that such measures can only have their effects over a relatively long period of time. They are the kind of policies which should be pursued at all times but cannot be used to bring a serious degree of inflation under control within a relatively short period.

After demand and supply policies have been covered I think the only ground left is the area of public response to inflationary pressures. Much depends on public attitudes and public understanding. Given our productivity performance over a long period of time, it is clear that average annual increases in income (all types of income) cannot exceed 3 or 4 per cent in money terms if reasonable price stability is to be achieved. While this annual rate of increase may not seem particularly large in an impatient age like ours, if an increase in real income per person of 3 per cent is projected it means a doubling of the standard of living every 23 years. But the important point to bear in mind, the ball on which we must keep our eye, is that it is real production and not the number of money counters turned over which determines the standard of living of the community. No matter how large the average increase in incomes in money terms, the increase in real terms cannot be any larger than what is permitted by the productivity of the economy. This is an inescapable guideline that is not established by government but by the performance of the economy itself.

It is to be expected that when inflationary pressures emerge, when there are shortages of certain types of goods and labour, and when there is some rise in the cost of living, demands for increases in money incomes that tend to exceed increases in real productivity will occur. But the degree of moderation in the response to this situation is crucial. Will producers whose products are in short supply react by exploiting their positions to the full and raising their prices as high as the traffic will bear? Will labour unions try to establish a pattern of wage increases far in excess of increases in productivity?

For a number of years now I have taken the position that this matter is so important that some means should be found for bringing the pressure of public opinion to bear on the determination of prices and costs. In my 1966 Annual Report, for example, I made the following statement:

> ... I hope that we can find a way to operate the economy at a high level of activity without price instability by a combination of better management of demand, better policies on the supply side to increase the efficiency and productivity of the economy, and better performance of the income-determining machinery in our society. In connection with the latter, it is clear that as a minimum there must be a realistic appreciation on the part of the public of the scale of the benefits the economy can physically provide through increases in output, and of the consequences of a failure to be competitive with other economies. A good deal of the recent discussion regarding this matter has revolved around the great difficulties associated with specific guidelines for wages and prices. It has to be borne in mind, however, that with or without publicly-sponsored guidelines, patterns do emerge. It is essential that these patterns be realistic. There is very little to be said in favour of income negotiations, often difficult, prolonged and costly to all concerned, which lead to agreements that are bound to be greatly amended in their final effect by subsequent increases in prices. As a matter of simple economic arithmetic, the real income of the community is inevitably limited by the amounts we can in fact produce. You cannot get a quart of wine out of a pint jug.

> The stake of the whole community in the maintenance of reasonable price stability and a competitive economy is so great that the normal reliance on market forces in the process of price and income determination needs to be reinforced by the constant pressure of informed public opinion.

In the light of this expression of view, you will understand that I welcome the establishment of the Prices and Incomes Commission and the appointment of Dr. John Young of the University of British Columbia, an economist who has already made outstanding contributions to the discussion of economic policy in this country, as its Chairman. Since the Bank of Canada is directly affected, perhaps I can also note that Mr. George Freeman, who has been with us for many years and who has been Chief of the Research Department of the Bank during the past four years, has gone on leave of absence to become one of the other Commissioners. He will be greatly missed at the Bank and his move is a measure of the importance that we attach to the work of the Commission. I am confident that the Prices and Incomes Commission will make a substantial contribution to understanding and to the improvement of attitudes in this key area.

Mr. Chairman, the problems of inflation and inflationary psychology have become so serious that we must, in my judgment, continue on the present course of economic policy until they are finally dealt with. We need not only to continue to use strong monetary and fiscal policies but we also need all the help we can get from supply policies and attempts to improve public attitudes. I do not apologize for spending most of my time today on the problem of inflation because I believe it and the problem of high interest rates are inextricably bound up together and the solution of the latter depends almost entirely on success in dealing with inflation. As I have already indicated, I believe that our major economic policies are now on the right track. I am also hopeful that we can expect more help from developments in the United States where the fight against inflation has been seriously engaged. I know that there is a danger of wishful thinking in these matters, but in the past few weeks I have on occasion thought that I could detect some faint glimmering of light on the horizon. There are indications of some alleviation of demand pressures in certain sectors of the economy, both here and in the United States. We may be witnessing the beginning of some healthy uncertainty regarding the inevita-ability of continued inflation. One is even beginning to hear warnings about the danger of over-kill. This is all to the good. What we need more than anything else at this time is to break the inflationary psychology. We must, of course, watch the situation carefully and examine the evidence day by day, but if at the first signs that our policies are achieving some success we take fright and abandon them, we shall be back at square 1 in the fight against inflation and inflationary expectations. No one should expect the road to price stability to be short; we have too many cost increases already built into the system. And no one should expect it to be painless. But this country has a great potential for economic growth and for improving the quality of life for all its citizens if we can break the hold of inflation. For my part, I am confident that we can muster the determination and persistence to finish this job.